PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Continuation Application of:	
WATSON et al.	Office of Initial Patent Examination
Serial No.: 09/474,083	
Filed: This application filed: October 12, 2001	
For: METHOD	

PRELIMINARY AMENDMENT

ASSISTANT COMMISSIONER FOR PATENTS
Washington, D.C. 20231

Sir:

Prior to an examination on the merits, please amend the above identified application as follows:

IN THE SPECIFICATION:

Please insert the following as the first sentence.

This application is a continuation application of pending U.S. application serial number 09/474,083, filed December 29, 1999 (of which the entire disclosure of the pending, prior application is hereby incorporated by reference), which is a continuation of international application number PCT/GB98/01931, filed 1 July 1998, which itself is a continuation of U.S. provisional application number 60/053,837, filed 25 July 1997.

IN THE CLAIMS:

Please replace claims 3, 5-6, 8, 10-11 and 13-15 with the following amended claims.

3(Amended). A method as claimed in claim 1 wherein said imaging procedure is a gradient echo or echo planar imaging procedure.

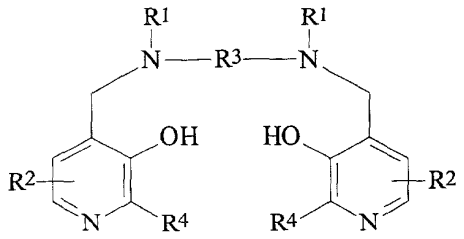
5(Amended). A method as claimed in claim 3 wherein said imaging procedure is one in which TI (inversion time) is 100 to 800 msecs, TR (repetition time) is 2000 msecs and TE (echo time) is less than 20 msecs.

6(Amended). A method as claimed in claim 1 wherein said maganese complex or salt thereof is administered at a dosage of 0.005 to 0.2 mmol/kg bodyweight.

8(Amended). A method as claimed in claim 1 wherein said maganese complex is a maganese chelate complex having a K_a value of from 10^7 to 10^{25}.

10(Amended). A method as claimed in claim 8 wherein said chelate has a K_a value smaller by a factor of at least 10^3 than the K_a value of the corresponding ferric (Fe^{3+}) chelate.

11(Amended). A method as claimed in claim 8 wherein said manganese chelate comprises a chelating compound of formula I:



(I)

or a salt thereof

(wherein in formula I

each R^1 independently represents hydrogen or $-CH_2COR^5$;

R^5 represents hydroxy, optionally hydroxylated alkoxy, amino or alkylamido;

each R^2 independently represents a group XYR^6;

X represents a bond, or a C_{1-3} alkylene or oxoalkylene group optionally substituted by a group R^7;

Y represents a bond, an oxygen atom or a group NR^6;

R^6 is a hydrogen atom, a group $COOR^8$, an alkyl, alkenyl, cycloalkyl, aryl or aralkyl group optionally substituted by one or more groups selected from $COOR^8$, $CONR^8_2$, NR^8_2, OR^8, $=NR^8$, =O, $OP(O)(OR^8)R^7$ and OSO_3M;

R^7 is hydroxy, an optionally hydroxylated, optionally alkoxylated alkyl or aminoalkyl group;

R^8 is a hydrogen atom or an optionally hydroxylated, optionally alkoxylated alkyl group;

M is a hydrogen atom or one equivalent of a physiologically tolerable cation;

R^3 represents a C_{1-8} alkylene group, a 1,2-cycloalkylene group, or a 1,2-arylene group; and

each R^4 independently represents hydrogen or C_{1-3} alkyl).

13(Amended). A method as claimed in claim 11 wherein in formula I, R^3 is ethylene and each group R^1 represents $-CH_2COR^5$ in which R^5 is hydroxy.

14(Amended). A method as claimed in claim 11 in which the compound of formula I is N,N'-bis-(pyridoxal-5-phosphate)-ethylenediamine-N,N'-diacetic acid (DPDP) or N,N'-dipyrodioxyl-ethylenediamine-N,N'-diacetic acid (PLED).

15(Amended). A method as claimed in claim 8 wherein said chelate complex is a complex of a linear, branched or macrocyclic chelant selected from polyaminopolycarboxylic acid chelants and carboxylic acid derivatives thereof.

Please cancel claims 17-30 without prejudice or disclaimer.

REMARKS

Applicants have amended the specification to cross reference the parent applications of which this application is a continuation of a pending U.S. application, which is a continuation of a PCT application designating the United States which itself is a continuation of a U.S. provisional application.

Applicants have also amended claims 3, 5-6, 8, 10-11 and 13-15 and canceled claims 17-30 in order to reduce the filing fee by deleting the multiple dependencies and additional independent claims. Applicants retain the right to reintroduce any subject matter canceled by the present Amendment at any time during the prosecution of this application or any continuation or divisional thereof in the United States.

The present application is a continuation application and the prior art cited in the parent applications should be taken into consideration in the present application. In accordance with MPEP §2001.06(b) no copies of the prior art in the parent applications are submitted herewith. The reference cited forms from the parent applications are submitted herewith for the convenience of the Examiner. In accordance with MPEP §609, a Form 1449 listing these references is also submitted herewith. Confirmation that the prior art cited in the parent applications has been considered in the next Official Action is most respectfully requested.

In view of the above amendments to the claims an early and favorable action on the merits is now in order and is most respectfully requested.

Respectfully submitted,
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Marked-Up Version Showing Changes Made

IN THE CLAIMS:

Please replace claims 3, 5-6, 8, 10-11 and 13-15 with the following amended claims.

3(Amended). A method as claimed in claim 1 [or claim 2] wherein said imaging procedure is a gradient echo or echo planar imaging procedure.

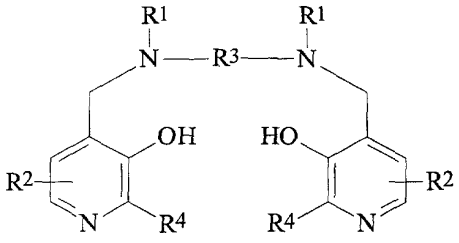
5(Amended). A method as claimed in claim 3 [or claim 4] wherein said imaging procedure is one in which TI (inversion time) is 100 to 800 msecs, TR (repetition time) is 2000 msecs and TE (echo time) is less than 20 msecs.

6(Amended). A method as claimed in [any preceding claim] claim 1 wherein said maganese complex or salt thereof is administered at a dosage of 0.005 to 0.2 mmol/kg bodyweight.

8(Amended). A method as claimed in [any preceding claim] claim 1 wherein said maganese complex is a maganese chelate complex having a K_a value of from 10^7 to 10^{25}.

10(Amended). A method as claimed in claim 8 [or claim 9] wherein said chelate has a K_a value smaller by a factor of at least 10^3 than the K_a value of the corresponding ferric (Fe^{3+}) chelate.

11(Amended). A method as claimed in [any one of claims 8 to 10] claim 8 wherein said manganese chelate comprises a chelating compound of formula I:



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each R^4 independently represents hydrogen or C_{1-3} alkyl).

13(Amended). A method as claimed in claim 11 [or claim 12] wherein in formula I, R^3 is ethylene and each group R^1 represents $-CH_2COR^5$ in which R^5 is hydroxy.

14(Amended). A method as claimed in [any one of claims 11 to 13] claim 11 in which the compound of formula I is N,N'-bis-(pyridoxal-5-phosphate)-ethylenediamine-N,N'-diacetic acid (DPDP) or N,N'-dipyrodioxyl-ethylenediamine-N,N'-diacetic acid (PLED).

15(Amended). A method as claimed in [any one of claims 8 to 10] claim 8 wherein said chelate complex is a complex of a linear, branched or macrocyclic chelant selected from polyaminopolycarboxylic acid chelants and carboxylic acid derivatives thereof.